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# California stock, north of Point Conception
#
# SS2 Version 2.00g (July 2007)
# BASE catch stream
# M females = 0.10, M males = 0.12
# steepness = 0.58 based on Dorm recommendation
# RecFIN CPUE index split: post-2000 q as separate fishery
#
#
1916
2006
1
12
1
3
5
REC%COMMHKL%COMMNET%CDFGCPFV%juvcore%juvdive%ghost%post2000
0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5
2
30 # 30+ in this bin
# Initial Equil Catch
0 0 0.0
# Landings
0.0 0.4 0.0 #1916
1.6 1.3 0.0 #1917
3.2 2.1 0.0 #1918
4.8 1.8 0.0 #1919
6.4 2.4 0.0 #1920
8.0 2.4 0.0 #1921
9.5 2.6 0.0 #1922
11.1 3.5 0.0 #1923
12.7 3.6 0.0 #1924
14.3 4.6 0.0 #1925
15.9 6.1 0.0 #1926
17.5 5.9 0.0 #1927
19.1 7.6 0.0 #1928
20.7 7.2 0.0 #1929
22.3 10.4 0.0 #1930
23.9 10.1 0.0 #1931
25.4 9.1 0.0 #1932
27.0 8.6 0.0 #1933
28.6 9.0 0.0 #1934
30.2 11.8 0.0 #1935
31.8 14.5 0.0 #1936
37.8 12.8 0.0 #1937
37.2 11.4 0.0 #1938
32.6 9.7 0.0 #1939
46.9 12.3 0.0 #1940
0 11.6 0.0 #1941
0 5.1 0.0 #1942
0 6.6 0.0 #1943
0 15.6 0.0 #1944
0 49.1 0.0 #1945
16 39.9 0.0 #1946
32 35.8 0.0 #1947
64 18.9 0.0 #1948
82.9 14.6 0.0 #1949
101.1 21.1 0.0 #1950
115.5 21.9 0.0 #1951
100.5 16.0 0.0 #1952
85.5 15.7 0.0 #1953
106.3 5.9 0.0 #1954
126.8 5.4 0.0 #1955
141.6 8.0 0.0 #1956
138.1 10.3 0.0 #1957
226.7 19.7 0.0 #1958
188.2 16.9 0.0 #1959
146.7 7.5 0.0 #1960
110.9 12.2 0.0 #1961

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127	7.5	0.0	#1962
130.7	5.0	0.0	#1963
99.5	6.2	0.0	#1964
154.7	7.3	0.0	#1965
167	8.1	0.0	#1966
164	7.7	0.0	#1967
296.8	7.1	0.0	#1968
279.3	8.5	3.5	#1969
376	10.5	4.5	#1970
313.8	7.8	26.0	#1971
431.2	12.2	32.2	#1972
632.6	19.3	74.7	#1973
716.8	15.6	106.5	#1974
695.6	16.0	119.2	#1975
637.4	22.2	39.1	#1976
569.9	18.2	52.2	#1977
523.7	4.6	16.8	#1978
658	34.9	13.3	#1979
487	49.6	2.3	#1980
826.5	37.9	1.2	#1981
707.7	60.6	0.5	#1982
661.2	55.2	0.8	#1983
469.2	11.3	1.3	#1984
261.7	36.5	134.5	#1985
124.7	2.8	12.8	#1986
258.9	7.8	0.4	#1987
307.1	7.7	0.1	#1988
245	17.2	14.1	#1989
224.4	26.8	1.5	#1990
186.9	35.4	1.4	#1991
493.6	181.4	0.0	#1992
374.4	134.3	0.3	#1993
305.8	68.8	0.0	#1994
216.3	28.5	0.0	#1995
164	44.0	0.1	#1996
296.1	63.7	0.0	#1997
249.4	47.7	0.0	#1998
198.6	35.7	0.1	#1999
150.7	15.6	0.0	#2000
115.6	19.7	0.0	#2001
148.8	18.5	0.0	#2002
219.9	9.2	0.0	#2003
149.9	14.8	0.0	#2004
162.9	21.7	0.0	#2005
319.6	21.9	0.0	#2006

56 # Surveys

#RecFIN CPUE

#split as another survey in 2000 below, bag limit change, change in q

#year season type index jack.cv

1980	1	1	0.373	0.25
1981	1	1	0.513	0.29
1982	1	1	0.617	0.30
1983	1	1	0.382	0.26
1984	1	1	0.350	0.25
1985	1	1	0.339	0.27
1986	1	1	0.063	0.26
1987	1	1	0.091	0.37
1988	1	1	0.135	0.35
1989	1	1	0.082	0.33
1990	1	1	-0.1	-1
1991	1	1	-0.1	-1
1992	1	1	-0.1	-1
1993	1	1	0.217	0.23
1994	1	1	0.159	0.24
1995	1	1	0.353	0.46
1996	1	1	0.252	0.19
1997	1	1	-0.1	-1
1998	1	1	-0.1	-1
1999	1	1	0.251	0.16

#

#CDFG CPFV onboard observer survey - central California

#year season type index jack.cv

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1987    1     4      1.0751251      0.20050221
1988    1     4      0.8947557      0.12897137
1989    1     4      1.0064529      0.10044706
1990    1     4      0.8847844      0.14203142
1991    1     4      1.1419153      0.13896742
1992    1     4      2.2500415      0.08450166
1993    1     4      1.897683       0.08993578
1994    1     4      1.3319015      0.09220232
1995    1     4      1.4248993      0.0937878
1996    1     4      1.3668195      0.0853881
1997    1     4      3.1537675      0.09389103
1998    1     4      3.7558219      0.094172
#
#juvenile midwater trawl "core" area survey - did not use in final model
#year   season  type   index  jack.cv
#1986    1       5      0.2387  0.4257
#1987    1       5      1.9584  0.2526
#1988    1       5      4.1236  0.2300
#1989    1       5      0.7153  0.3365
#1990    1       5      0.1943  0.3898
#1991    1       5      0.6095  0.3096
#1992    1       5      0.0041  0.8144
#1993    1       5      0.3058  0.3337
#1994    1       5      0.0626  0.5440
#1995    1       5      0.0495  0.5945
#1996    1       5      0.0640  0.8181
#1997    1       5      0.0400  0.5784
#1999    1       5      0.0622  0.4550
#2000    1       5      0.0480  0.6980
#2001    1       5      0.5694  0.3178
#2002    1       5      3.8316  0.2586
#2003    1       5      1.1813  0.2681
#2004    1       5      0.5068  0.3442
#
# changed values to represent stock assessment area only
# CVs changed to 0.35 as recommended at mopup review
2001    1       5      2.54    0.35
2002    1       5      7.74    0.35
2003    1       5      4.42    0.35
2004    1       5      5.95    0.35
2005    1       5      2.45    0.35
2006    1       5      1.36    0.35
#
#average CPUE from Miller and Geibel 1973 - did not use in final model
#year   season  type   index  make up cv
#1959    1       6      1.01836394  0.25 - Monterey area only
1960    1       6      0.717757718   0.25
1961    1       6      0.367636936   0.25
1962    1       6      0.388962527   0.25
1963    1       6      0.474032959   0.25
1964    1       6      0.317549519   0.25
1965    1       6      -1      -1
1966    1       6      0.264060688   0.25
1967    1       6      0.274436168   0.25
1968    1       6      0.216010569   0.25
1969    1       6      0.430684584   0.25
1970    1       6      0.452762666   0.25
#1971    1       6      0.69063893  0.25 - Monterey area only
#
# post 2000 is new survey - RecFIN bag limit change - change in q
2000    1     8      0.093  0.29
2001    1     8      0.070  0.31
2002    1     8      0.317  0.19
2003    1     8      0.191  0.19
2004    1     8      0.324  0.16
2005    1     8      0.299  0.18
2006    1     8      0.405  0.15
1      # Discard type
0      # number of observations
0      # Mean Body Weight
# Composition Conditioners
-1
0.001

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	3	4	2	2	1	0	3	0	1	0	3	0	4	14	21	19	22	20	21	11
1982	1	7	3	0	1	-1	-1	77	0	0	0	0	5	4	3	4	1	3	1	3
	15	14	14	14	14	11	14	7	12	7	4	5	4	3	5	6	4	7	5	7
	0	0	0	0	7	11	8	5	4	4	5	10	8	5	6	4	7	5	7	
	6	5	5	1	2	2	0	1	1	0	0	0	0	0	0	0	0	0	0	
	1	7	3	0	1	-1	-1	30	0	0	0	0	7	6	3	3	2	0	4	6
	9	10	11	11	9	21	20	13	9	8	10	0	2	5	8	2	2	1	2	2
	0	0	0	0	2	5	2	3	5	0	0	0	2	5	8	2	2	1	2	2
	0	2	4	0	1	0	0	1	0	0	0	1	0	7	9	12	22	23	23	24
1984	1	7	3	0	1	-1	-1	64	0	0	0	0	14	8	4	6	3	0	3	12
	15	16	15	13	10	20	24	13	12	11	9	6	10	6	5	8	4	15	4	
	0	0	0	0	0	6	3	10	9	8	9	0	0	0	0	0	0	0	0	
	4	5	5	6	8	2	3	3	0	0	3	0	0	0	0	0	0	0	0	

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#
#
0 # Mean Size at Age Observations
0 # Number of Environmental Variables
0 # Environmental Observations
999 #

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